

REMARKS

Claims 1-10 are pending in this application.

Applicant has amended claims 1, 9, and 10. In addition, Applicant has made minor changes to the specification (including changing the Title). These changes do not introduce any new matter.

Objection to the Specification

In response to the objection to the specification, Applicant has corrected the informalities identified by the Examiner. In addition, Applicant has changed the Title to “Image Processing Apparatus for Converting Color Data by Referring to a Reconstructed Color Conversion Table and an Image Processing Method for the Same.” Accordingly, Applicant requests that the objection to the specification be withdrawn.

Rejection Under 35 U.S.C. § 103

Applicant respectfully requests reconsideration of the rejection of claims 1-10 under 35 U.S.C. § 103(a) as being unpatentable over *Kakutani* (WO 02/32113 A1, which corresponds to US 7,046,844 B2) in view of *Falk* (US 2004/0046766 A1) and *Newman* (US 6,023,351). As will be explained in more detail below, the combination of *Kakutani* in view of *Falk* and *Newman* would not have rendered the subject matter defined in independent claims 1, 9, and 10, as amended herein, obvious to one having ordinary skill in the art.

In the Amendment dated February 5, 2008 (which was received in the PTO on February 11, 2008), Applicant set forth the differences between the claimed subject matter and the *Kakutani* reference. In support of the obviousness rejection, the Examiner asserts that the *Falk* and *Newman* references cure the deficiencies of the *Kakutani* reference relative to the claimed subject matter. Applicant respectfully traverses the obviousness rejection.

The *Falk* and *Newman* References

The *Falk* reference discloses methods and apparatus for converting color values. In particular, the technique of *Falk* solves the problem of saturation error that occurs at the edge of a color region (see Figure 2). As shown in Figure 2, when the converted value is zero (or 255), an attempt to obtain a mean value of the values of two points results in an interpolation error. Accordingly, *Falk* uses a look up table (LUT) expanded for interpolation, instead of a compressed LUT, in an attempt to obtain a correct interpolation result (the “compressed LUT” is a look up table with the tone interval of 33 (5-bit), instead of 255 (8-bit), which is different from the compressed tone variation of the claimed subject matter). *Falk* first uses a compressed LUT to convert color values in the first color system to color values in the intermediate color system, and then decompresses the data including the adjacent intermediate color values, so as to convert the color values in the intermediate color system to correct values.

The *Newman* reference discloses a regularized printer LUT with improved accuracy. For the preparation of a LUT, *Newman* sets grid points in a color space at a first LUT interval, and for critical color regions, measures color patches at intermediate points between the first LUT interval. *Newman* then inserts all measurement values between the grid points of the regularized LUT, and inserts interpolated values into the regularized LUT at grid points that were not actually measured to produce a LUT at a second LUT interval, which is less than the first interval.

In the foregoing manner, *Newman* produces the LUT completely regularized at the second interval, which is less than the first interval. Accordingly, *Newman* is able to improve that accuracy of the LUT, however, the LUT is improved by a principle that is significantly different from that of the claimed subject matter (see Paragraphs [0094] to [0103] and Figures 15-17 of the subject application).

The Claimed Subject Matter Distinguished from the Applied References

The claimed subject matter and the *Kakutani* reference both use an encoding coefficient as shown in Figure 8, however, the claimed subject matter is distinguishable from *Kakutani* because the claimed subject matter specifies that lattice points are added for interpolation, as shown in Figure 17(c), to an intermediate color conversion table before an encoding process.

As discussed above, the compressed LUT shown by *Falk* is different from the compressed tone variation of the claimed subject matter. As such, the *Falk* reference does not disclose or suggest either the claimed “intermediate table generation module” or the claimed “color conversion table reconstruction module.”

The *Newman* reference teaches only an interpolation technique for finely performing interpolation on encoded data, as shown in Figure 16(c) of the subject application. In that case, a color shift occurs.

As such, even if the *Kakutani*, *Falk*, and *Newman* references were to be combined in the manner proposed by the Examiner, this combination would not have resulted in an apparatus, method, or computer-readable storage medium having each and every feature of the claimed subject matter. Thus, the combination of *Kakutani* in view of *Falk* and *Newman* would not have rendered the claimed subject matter obvious to one having ordinary skill in the art.

Nevertheless, to further distinguish the claimed subject matter from the applied references, Applicant has amended independent claim 1 to specify as follows:

a color conversion table reconstruction module that specifies second image data corresponding to multiple lattice points, which are set to include at least different lattice points from newly added lattice points as well as existing lattice points, which are both included in the intermediate color conversion table, based on the intermediate color conversion table and makes the specified second image data subjected to the encoding process, so as to reconstruct a color conversion table that is used for actual color conversion from the

intermediate color conversion table and generate a reconstructed color conversion table.

Applicant has amended each of independent claims 9 and 10 along the same lines that claim 1 has been amended. With the foregoing changes, the presently claimed subject matter includes features that are neither shown nor suggested in any of the *Kakutani*, *Falk*, and *Newman* references.

Accordingly, independent claims 1, 9, and 10, as amended herein, are patentable under 35 U.S.C. § 103(a) over the combination of *Kakutani* in view of *Falk* and *Newman*. Claims 2-8, each of which ultimately depends from claim 1, are likewise patentable under 35 U.S.C. § 103(a) over the combination of *Kakutani* in view of *Falk* and *Newman* for at least the same reasons set forth above regarding claim 1.

Conclusion

In view of the foregoing, Applicant respectfully requests reconsideration and reexamination of claims 1-10, as amended herein, and submits that these claims are in condition for allowance. Accordingly, a notice of allowance is respectfully requested. In the event a telephone conversation would expedite the prosecution of this application, the Examiner may reach the undersigned at (408) 749-6902. If any additional fees are due in connection with the filing of this paper, then the Commissioner is authorized to charge such fees to Deposit Account No. 50-0805 (Order No. MIPFP058).

Respectfully submitted,
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